

REMARKS

Applicants thank the Examiner for the courtesy of a telephonic interview on September 18, 2007. Applicants' representatives Robert M. Bain and Mark Pitchford discussed the invention and the cited reference in general with Examiner Anish Sikri and Supervisory Examiner David England. Applicants discussed the prior art and loading software from an integrated hardware device to a computer in response to connecting the integrated hardware device to the computer with respect to claims 1 and 8 in particular. No demonstration was given, no agreement was reached, and no exhibit was shown.

Applicants have thoroughly considered the Examiner's remarks in the June 20, 2007 non-final Office action. Claims 1, 8, and 20 have been amended by this Amendment A to more clearly set forth the invention. Claims 1-23 of the application are thus presented for further examination. Reconsideration of the application in light of the amendments to the claims and the following remarks is respectfully requested.

Applicants acknowledge the Examiner's consideration of the Information Disclosure Statements filed 1/26/2006, 2/03/2006, and 9/10/2006, and the indication that the drawings are accepted.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1, 5, 6, 14, and 21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,549,966 to Dickens et al (hereinafter Dickens) in view of U.S. Patent No. 6,370,603 to Silverman et al (hereinafter Silverman). Applicants submit that the cited references fail to disclose each and every aspect of the claims.

Dickens teaches an intelligent universal serial bus (USB) switch for connecting multiple peripherals to multiple host computers. The switch receives data from a peripheral or host, forwards it to its intended destination, and allocates a peripheral to a particular host for a preset period of time (i.e., a timeout period) (see Dickens at Col. 2, Lines 42-58). The allocation of a peripheral to a host computer is independent of the allocation of another peripheral to any other host computer (see Dickens at Col. 9, Lines 20-34). The switch is transparent to the peripheral and the host computer such that the host and peripheral operate as though they are directly connected, and when the peripheral is switched to another host, the new pair operates as though

they are directly connected (see Dickens at Abstract, Col. 3, Lines 12-55, and Col. 40, Lines 50-59).

Silverman teaches a smart cable (i.e., an adapter cable incorporating an integrated circuit) for translating a first communications protocol to a second communications protocol such that the protocol translation is transparent to the host (see Silverman at Col. 4, Lines 37-44 and Col. 8, Lines 36-53, and Col. 10, Lines 39-46). When the smart cable is translating networking protocols, drivers installed on a host computer cause the host computer to see the smart cable as a network connection (see Silverman at Col. 9, Lines 16-18).

At page 4 of the Office action, the Examiner asserts, "Silverman et al discloses the memory storing a driver for the communications router and a software load to be installed on a computer to which either the first connector or the second connector is connected" (citing Silverman et al Col. 5, Lines 55-65, Col. 9, Lines 16-18, and Col. 10, Lines 14-25). Silverman at Col. 5, Lines 55-65 states:

"Therefore, according to a first aspect of the invention, a technique is provided for combining one or more industry standard function(s) along with a user-programmable section. This can be achieved by the combination of an ASIC or other custom logic with, for example, a PLDFPGA on a board, multichip module, or preferably on a single integrated circuit device. For the fixed function portion, ASIC technology is used to efficiently implement the circuit. The PLDFPGA is used for portions of the design that are changing due to the ease and low cost of modifying their function(s). Alternatively, SRAM or Flash may be substituted for the PLDIFPGA portion."

This portion of Silverman describes physical implementations of an integrated circuit for translating data from a first format to a second format (i.e., USB to Ethernet and vice versa). It does not disclose transferring data stored in a memory of the smart cable to a host computer. With respect to the second portion of Silverman cited by the Examiner, Silverman at Col. 9, Lines 16-18 states, "As far as software is concerned, the controller 500 can operate with standard Win95-type drivers, NDIS drivers are also readily supported." This portion of Silverman merely identifies a driver type for use with a smart cable designed to adapt a USB port of a host computer to an ethernet network. The cited portion does not disclose transferring data stored in a memory of the smart cable to the host computer. Finally, Silverman at Col. 10, Lines 14-25 states:

"Networking support is provided via a NDIS 4.0 intermediate mini-driver. This NDIS intermediate mini-driver dynamically connects to a USB driver for data support. If the USB driver is not available (i.e., the USB device is not connected or is disabled), the NDIS driver will return a status of NOT_AVAILABLE. This behavior allows the user to disconnect and reconnect their USB Ethernet without reinstalling their NDIS drivers and re-booting. Additionally, drivers for the following operating systems are available: Windows NT 5.0; Windows 95 OSR 2.1; and Windows 98."

This portion of Silverman describes the operation of network device interface specification (NDIS) intermediate drivers in a Microsoft Windows operating system environment. The cited portion does not disclose transferring data stored in a memory of the smart cable to a host computer. Thus, Applicants submit that the cited references fail to teach transferring data, particularly a driver and a software load, stored in a memory of a smart cable or USB switch to a host computer.

In contrast, the aspects of the present invention include transferring data stored in a memory of an apparatus which connects two computers to at least one of the computers to which the apparatus is connected. In one embodiment of the invention, this allows a migration cable to be a self contained unit. That is, all of the software necessary to enable communication between two computers via the cable (i.e., drivers) and a software load (e.g., a migration utility) are automatically installed on a host computer when the migration cable is connected to the computer (see, for example, Application at paragraphs [0020]-[0024] and FIG. 2). To this end, claim 1 recites, "... a nonvolatile memory operatively situated between the first and second connectors and associated with the communications router, said memory storing a driver for the communications router and a software load to be installed on a target computer to which either the first connector or the second connector is connected, wherein said driver and said software load are installed on the target computer from the nonvolatile memory in response to connecting the first or second connector to the target computer."

Thus, the cited references fail to teach each and every aspect of claim 1, and claim 1 is allowable over the cited art. Claims 2-7 depend from claim 1 and are allowable over the cited art for at least these reasons. Claim 14 depends from claim 8 and is allowable for at least the same reasons as claim 8, as explained below. Claim 21 depends from claim 20 and is allowable for at least the same reasons as claim 20, as explained below.

Claims 2-4, 7, 9-13, 15-19, and 22-23 stand rejected under 35 U.S.C. 103(a) as being

unpatentable over Dickens in view of U.S. Publication No. 2003/0061285 by Usui et al (hereinafter Usui). Claims 2-4 and 7 depend from claim 1 and are allowable for at least the same reasons as claim 1, as explained above. Claims 9-13 and 15-19 depend from claim 8 and are allowable for at least the same reasons as claim 8, as explained below. Claims 22-23 depend from claim 20 and are allowable for at least the same reasons as claim 20, as explained below.

Claims 8 and 20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Dickens in view of Silverman, in further view of Usui. Applicants submit that the cited references do not disclose each and every aspect of the claims.

At page 14 of the Office action, the Examiner asserts, "Silverman et al clearly discloses the method of loading a driver for the communications router to at least one of the computers and the said driver residing in the nonvolatile memory" (citing Silverman et al., Col. 5, Line 55-65, Col. 9, Lines 16-18, and Col. 10, Lines 14-25). As explained above, these portions of Silverman do not disclose transferring data, particularly a driver and a software load, stored in a memory of a smart cable or USB switch to a host computer. None of the cited references cure this defect.

In contrast, aspects of the present invention include transferring data stored in a memory of an apparatus which connects two computers to at least one of the computers to which the apparatus is connected. To this end, claim 8 recites, "... loading a driver for the communications router from the nonvolatile memory of the integrated hardware device to at least one of the computers in response to the autorun function, said driver residing in the nonvolatile memory; enabling communication between the computers via the communications router of the integrated hardware device connected therebetween after loading of the driver; installing setup software from the nonvolatile memory of the integrated hardware device to at least one of the computers via the communications router, said setup software also residing in the nonvolatile memory." Claim 20 recites, "... a setup program for automatically installing the user interface, wherein the computer readable media and the communications router are operatively connected between a first connector and a second connector, each of said connectors being adapted for connection to a computer, and wherein a target computer automatically installs the driver on the target computer and the setup program automatically installs the user interface on the target computer in response to connecting the first or second connector to the target computer."

Thus, the cited references fail to teach each and every aspect of claims 8 and 20, and claims 8 and 20 are allowable over the cited art. Claims 9-19 and 21-23 depend from these

claims and are allowable over the cited art for at least these reasons.

CONCLUSION

In view of the foregoing, Applicants submit that independent claims 1, 8, and 20 are allowable over the cited art. Claims 2-7, 9-19, and 21-23 depend from these claims and are believed to be allowable for at least the same reasons as the independent claims from which they depend.

It is felt that a full and complete response has been made to the Office Action, and Applicants respectfully submit that pending claims 1-23 are allowable over the cited art and that the subject application is now in condition for allowance. The fact that Applicants may not have specifically traversed any particular assertion by the Examiner should not be construed as indicating Applicants' agreement therewith.

The Applicants wish to expedite prosecution of this application. If the Examiner deems the application to not be in condition for allowance, the Examiner is invited and encouraged to telephone the undersigned to discuss making an Examiner's amendment to place the application in condition for allowance.

Applicants do not believe that a fee is due in connection with this response. If, however, the Commissioner determines that a fee is due, the Commissioner is authorized to charge Deposit Account No. 19-1345.

Respectfully submitted,

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